

# Notice of Allowability

Application No.

10/509,366

Examiner

Abdel A. Mohamed

Applicant(s)

KIM ET AL.

Art Unit

1654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment and remarks filed 08/10/07 and telephonic interview of 10/10/07.
2. ☒ The allowed claim(s) is/are 1,2,5,6,10,11,14,15 and 21-24.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 20071011.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### **DETAILED ACTION**

#### **ACKNOWLEDGMENT TO AMENDMENT, REMARKS AND THE STATUS OF THE CLAIMS**

1. The amendment and remarks filed 08/10/07 are acknowledged, entered and considered. In view of Applicant's request claim 2 has been amended, claims 19 and 20 have been canceled and claims 21-24 have been added. Claims 1, 2, 5, 6, 10, 11, 14, 15 and 21-24 are now pending in the application. The restriction requirements with respect to SEQ ID NOS:1-34 have been withdrawn. The objections to the specification, drawings and claims and the rejections under 35 U.S.C. 102(b) over the prior art of record are withdrawn in view of Applicant's amendment and remarks filed 08/10/07.

#### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview with Peter Ludwig on 10/10/07.

4. This application has been amended as follows:

Replace the claims as follows:

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Claim 1 (currently amended) An antimicrobial peptide including the amino acid sequence represented as the following sequence equation (I):

N-terminus – X<sup>1</sup>X<sup>2</sup>X<sup>3</sup>X<sup>4</sup>X<sup>5</sup>X<sup>6</sup>X<sup>7</sup>X<sup>8</sup>X<sup>9</sup>X<sup>10</sup>X<sup>11</sup>X<sup>12</sup>X<sup>13</sup>X<sup>14</sup>X<sup>15</sup> –C-terminus-(I)

Wherein,

X<sup>1</sup> is absent or a basic amino acid;

X<sup>2</sup> are two identical or different hydrophobic amino acids;

X<sup>3</sup> is a basic amino acid;

X<sup>4</sup> is glutamine or asparagines;

X<sup>5</sup> is phenylalanine or ~~tryptophane~~ tryptophan;

X<sup>6</sup> is proline;

X<sup>7</sup> is isoleucine or valine;

X<sup>8</sup> is glycine;

X<sup>9</sup> is a basic amino acid;

X<sup>10</sup> are two identical or different hydrophobic amino acids;

X<sup>11</sup> are two identical or different basic amino acids;

X<sup>12</sup> are two identical or different hydrophobic amino acids;

X<sup>13</sup> are two identical or different basic amino acids;

X<sup>14</sup> are two identical or different hydrophobic amino acids;

X<sup>15</sup> is absent or a basic amino acid.

Claim 2 (currently amended) The antimicrobial peptide according to claim 1, wherein one of the amino acid sequence sequences is selected from ~~has at least 23.8 % identity with SEQ ID NO NOS: 1 to 34.~~

#### **CITATION OF RELEVANT PRIOR ART**

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Leite et al (Pub. No. US 2003/014839) disclose antimicrobial peptides and methods for identifying and using such peptides.

#### **CONCLUSION AND FUTURE CORRESPONDANCE**

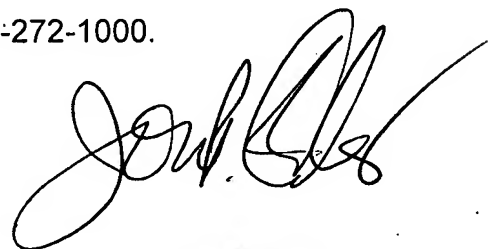
6. Claims 1, 2, 5, 6, 10, 11, 14, 15 and 21-24 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdel A. Mohamed whose telephone number is (571) 272 0955. The examiner can normally be reached on First Friday off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tsang Cecilia can be reached on (571) 272 0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**Jon Weber**  
**Supervisory Patent Examiner**

 Mohamed/AAM  
October 11, 2005